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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,956	10/15/2001	Frank Kappe	KAPPE=1	4398

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EXAMINER

KOSLOW, CAROL M

ART UNIT PAPER NUMBER

1755

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,956

Applicant(s)

KAPPE ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-64 is/are pending in the application.
- 4a) Of the above claim(s) 60-63 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-56 is/are allowed.
- 6) ☒ Claim(s) 57, 58 and 64 is/are rejected.
- 7) ☒ Claim(s) 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This action is in response to applicants' amendment of 7 August 2003. The substitute specification and newly supplied abstract are acceptable. Thus the objections to the disclosure are withdrawn. The amendments to the claims, which replaces original claims 1-29 with new claims 32-64 has overcome the objections and the 35 USC 112 rejections over the claimed. Applicants' arguments with respect to Mano were convincing and thus the rejections based on this reference are withdrawn. Applicants' arguments with respect to the remaining rejections have been fully considered but they are not persuasive.

Newly submitted claims 60-63 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The newly claimed ink, thermal transfer film and thermoplastic granules are distinct from the originally claimed method and zinc sulfide electroluminophores. The newly claimed inventions and the originally claimed electroluminophores are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as the phosphor layer in electroluminescent devices and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

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anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The newly claimed invention and the originally claimed method are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions they are not disclosed as capable of use together and they have different modes of operation, different functions, and different effects.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 60-63 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 57 and 64 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hase et al.

Examples 9-14 teach cubic zinc sulfide electroluminophores having an average particle size of 8 or 9 microns. The reference teaches the claimed electroluminophores.

Claims 57 and 64 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Marking et al.

Marking et al teaches particles having an average particle size of about 7-11 microns. The references teach the claimed electroluminophores.

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Claim 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hase et al.

Column 15, lines 13-16 teach the taught phosphor can be subjected to any known surface treatment. Page 13 teaches it is known in the art to apply protective layers, such as those claimed, to zinc sulfide particles. Thus one of ordinary skill in the art would have it obvious to apply the claimed known protective layers to the taught zinc sulfide particles. The reference teaches the claimed particles.

While the references do not teach using the taught zinc sulfide particles in electroluminescent devices, this does not mean they are not electroluminophores. Morimoto teaches ZnS:Ag,Al, the phosphor of Marking et al, is an electroluminophore and that gallium, aluminum and indium are all known co-activator for ZnS:Cu or ZnS:Au electroluminophores. Thus one of ordinary skill in art would expect the ZnS:M, M',Al, where M is Cu or Au and M' is Ga or In, phosphor of Hase et al to also be an electroluminophor since one would not the presence of more than one co-activator to prevent the compound from being activated by electricity. Applicants have not presented any evidence that the taught phosphors are not electroluminescent, as well as being cathodoluminescent. The rejections are maintained.

Claim 59 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 32-56 are allowable over the cited art of record.

Claims 32-55, directed to the method, are allowable for the reasons given in the previous office action. The claimed electroluminescent phosphors are not taught or suggested by the cited art of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (703) 308-3817. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (703) 308-3823.

The fax number for all official communications is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661 or (703) 308-0662.

cmk
September 9, 2003

C. Melissa Koslow
Primary Examiner
Tech. Center 1700